

Tom Klitsner:

Providing diverse, responsive resources to support Mission Area computing

The recent Executive Order creating the National Strategic Computing Initiative (NSCI) recognizes the value of high performance computing for economic competitiveness and scientific discovery and commits to accelerate delivery of exascale computing. The HPC programs at Sandia –the NNSA ASC program and Sandia’s Institutional HPC Program– are focused on ensuring that Sandia has the resources necessary to deliver computation in the national interest.

Our investments in the Institutional HPC Program have helped close the resource demand gap for Sandia’s Mission Areas. Institutional HPC usage has tripled across all of Sandia’s Program Management Units (PMUs). Our newest system, “Sky Bridge,” released in March 2015, increased computing cycles available on the Sandia Restricted Network (SRN) three-fold.

This year, with agreement of the Mission Computing Council, two large data-analytics systems were purchased for use in FY16. One of the systems, to be sited in SNL/CA, will focus on data analytics and cloud/emulytics® research. The other system, to be sited in SNL/NM, will handle data analytics and cloud/emulytic production work.

Next year, the ASC program investment will result in siting the first PetaFLOP systems at SNL. Current plans are to purchase an Institutional HPC system of similar size for use by all the SNL PMUs.

I hope you enjoy reading about the diverse projects supported on our computer systems, and that you will engage us and your Mission Computing Council representatives in meaningful dialogue to help guide priorities and future investments in Sandia’s HPC resources and capabilities.